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(54) Title: METHOD AND APPARATUS FOR MINIMIZING DIFFERENTIAL POWER ATTACKS ON PROCESSORS

LINE#	SOURCE TEXT TH = a random number between VMIN and VMAX	
1		
2	FOR V from VMIN to VMAX do	,
3	IF V < TH THEN	
4	DO statements l	{branch1}
5	ELSE	·
6	DO statements2	$\{branch2\}$
7	OF	* .

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(57) Abstract

A method of masking a conditional jump operation in a cryptographic processor, wherein programm execution jumps to one of two branches dependent on a first or second condition of a distinguishing value V relative to a reference wherein the reference is bounded by an upper limit Vmax and a lower limit Vmin. The method comprising the steps of determining the location of a conditional jump and inserting code thereat for executing instructions to change program execution to a respective one of the two branches by using said distinguishing value and a base address to compute a target address, wherein for each evaluation of said condition a different number of instructions are